## REMARKS

Claims 1, 3-12 and 14-20 are pending in this application. By this Amendment, claims 2 and 13 are canceled without prejudice to or disclaimer of the subject matter contained therein. Claims 1, 3, 8, 10 and 11 are amended and new claims 14-20 are added. Support for these amendments can be found in claims 2 and 13 as originally filed and in the specification as originally filed, for example, at paragraph [0038]. Support for the new claims can be found in original claims 5-10 and 12. Thus, no new matter is added.

Applicant thanks the Examiner for the indication that claims 5-10 and 12 would be allowable if the rejection under 35 U.S.C. §112, second paragraph, is overcome. Because the rejection is overcome for the reasons described below, claims 5-10 and 12 are in condition for allowance.

### I. Rejection Under 35 U.S.C. §112, second paragraph

The Office Action rejects claims 1 and 3 under 35 U.S.C. §112, second paragraph as incomplete for omitting essential elements and for omitting essential structural cooperative relationships of elements. Applicants respectfully traverse this rejection.

Specifically, the Office Action asserts that claim 1 has omitted a target-water-remove-rate determining means and a connection of the dialyzer with an autonomic-nerve-activity-related information obtaining device and a water-remove-rate display device. The Office Action further asserts that claim 3 has omitted a dialyzer control device and a connection of dialyzer with an autonomic-nerve-activity-related information obtaining device and a water-remove-rate changing means. Applicants submit that amended claims 1 and 3 contain these elements and relationships.

Accordingly, Applicants submit that claims 1 and 3 are complete and that the rejection has been overcome. Withdrawal of the rejection is respectfully requested.

## II. Rejections Under 35 U.S.C. §103(a)

The Office Action rejects claims 1-4, 11 and 13 under 35 U.S.C. §103(a) over U.S. Patent 6,200,485 to Kitaevich et al. in view of European Patent Application 956817 A1 to Miwa et al. Applicants respectfully traverse this rejection.

Claim 1 sets forth, in pertinent part, a "dialyzing apparatus comprising: a dialyzer ...; an autonomic-nerve-activity-related-information obtaining device which obtains autonomic-nerve-activity-related information that is related to an activity of an autonomic nerve of the patient, the autonomic-nerve-activity-related information being any one of (a) a low-frequency component of fluctuations of blood-pressure values of the patient, (b) a high-frequency component of fluctuations of pulse-period values of the patient, or (c) a pressoreceptor-reflex sensitivity defined as a ratio of one of the low-frequency component and the high-frequency component to the other of the two components; a target-water-remove-rate determining means for determining a target-water-remove rate based on autonomic-nerve-activity-related information obtained by the autonomic-nerve-activity-related-information obtaining device; and a water-remove-rate display device." Claim 3 and new claims 14, 17 and 18 each set forth dialyzing apparatus including similar autonomic-nerve-activity-related-information obtaining devices.

Kitaevich is cited for its disclosure of a dialyzing apparatus including a dialyzer that may remove water from blood; a monitor for monitoring a blood-pressure-change-related-information parameter, such as the patient's blood pressure, heart rate, systemic vascular resistance, or cardiac output; and a controller for changing the water removal rate based on weight signals from infusate, drained fluid and patient weight, and on the blood-pressure-change-related-information.

However, Kitaevich does not teach or suggest an autonomic-nerve-activity-related-information obtaining device which obtains autonomic-nerve-activity-related information that

is related to an activity of an autonomic nerve of the patient, the autonomic-nerve-activity-related information being any one of (a) a low-frequency component of fluctuations of blood-pressure values of the patient, (b) a high-frequency component of fluctuations of pulse-period values of the patient, or (c) a pressoreceptor-reflex sensitivity defined as a ratio of one of the low-frequency component and the high-frequency component to the other of the two components and a target-water-remove-rate determining means for determining a target-water-remove rate based on autonomic-nerve-activity-related information obtained by the autonomic-nerve-activity-related-information obtaining device, as set forth in claims 1 and 3 or similarly set forth in claims 14, 17 and 18.

Accordingly, Kitaevich, for at least these reasons, would not have rendered claim 1, its dependent claims 1-4, 11 and 13, or new claims 14-20 obvious. Miwa does not provide the information or motivation missing from Kitaevich.

Miwa is cited for its disclosure of a blood pressure monitoring apparatus. The Miwa apparatus continuously monitors a blood pressure of a patient and includes a blood pressure estimating means that calculates an estimated blood pressure according to a pre-determined relationship between blood pressure, pulse-wave propagation information and at least one of heart rate information and volume-pulse-wave area information. Miwa, paragraph [0033]. The blood pressure estimating means bases the calculation on time DT, and heart-beat period RR and a ratio, VR, of an area defined by a volume pulse wave from a peripheral portion of the subject to the heart-beat period. Miwa, paragraph [0009]. The estimated blood pressure is calculated according to an expression (2) $EBP = \alpha(1/DT_{RP}) + \beta RR + \gamma VR + \delta$, in which $\alpha$, $\beta$ and $\gamma$ are predetermined coefficients based on autonomic nerve activities determined by an autonomic nerve system activity determining means. Miwa, paragraphs [0033], [0038].

However, Miwa does not disclose an autonomic-nerve-activity-related-information obtaining device which obtains autonomic-nerve-activity-related information that is related to

an activity of an autonomic nerve of the patient, the autonomic-nerve-activity-related information being any one of (a) a low-frequency component of fluctuations of blood-pressure values of the patient, (b) a high-frequency component of fluctuations of pulse-period values of the patient, or (c) a pressoreceptor-reflex sensitivity defined as a ratio of one of the low-frequency component and the high-frequency component to the other of the two components and a target-water-remove-rate determining means for determining a target-water-remove rate based on autonomic-nerve-activity-related information obtained by the autonomic-nerve-activity-related-information obtaining device, as set forth in claims 1 and 3 or similarly set forth in claims 14, 17 and 18.

Rather than using the autonomic-nerve-activity-related information to determine a target-water-remove rate, Miwa discloses using autonomic-nerve-activity-related information only to change one or more of the coefficients, $\alpha$, $\beta$ and $\gamma$, in expression (2), thus changing the estimated blood pressure of the patient. Miwa, paragraph [0038]. Thus, Miwa does not provide this information that was missing from the teachings of Kitaevich. Accordingly, Miwa does not remedy the shortcomings of Kitaevich.

Accordingly, Applicants respectfully submit that claims 1-4, 11 and 13, and new claims 14-20, are patentable over Kitaevich even in view of Miwa. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

## III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3-12 and 14-20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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Attachment:
Petition for Extension of Time

Date: December 16, 2003

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